

Allowed Claims

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T-125 P.004/037 F-360

Serial No. 10/003,305

NIT-133-05

IN THE CLAIMS

1-29. Canceled.

30. (Currently Amended) A cell components recovering apparatus comprising:

a substrate being disposed in a separation cell, wherein ~~the~~ sample solution containing cells is supplied on a surface of the substrate, the substrate having a plurality of independent areas ~~are formed on the its surface of the~~ substrate;

capturing means for capturing each of the cells one by one separately on each of the plurality of independent areas; and

temperature control means for heating the surface of the substrate at one area of the plurality of independent areas to a predetermined temperature to destroy the cell captured at ~~the said~~ one area ~~of the areas~~, to liberate cell components from the cell captured at ~~the said~~ one area. ~~of the areas into the separation cell,~~

~~wherein, by introducing a washing solution into the separation cell, whereby the cells at the areas, except for the one area of the areas, remain on the areas, respectively,~~

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~~the washing solution is recovered to recover the cell components liberated from the cell, and~~  
~~wherein, by changing a position of the one area of the areas, the washing solution is recovered to recover the cell components liberated from the cell for each of the areas.~~

31. (Currently Amended) A cell component recovering apparatus according to claim 30, wherein the captured cell is a white blood cell.

32. (Previously Added) A cell component recovering apparatus according to claim 30, wherein the capturing means comprises means for applying an alternating field onto the surface of the substrate.

33. (Currently Amended) A cell components recovering apparatus according to claim 30, further comprising means for applying a DC field onto a surface of thesaid one area ~~of the one area of the areas~~ in a solution which contains no polynucleotide and has a pH value of 4 or lower, to attract nucleotide components to the surface of the one of the identified positions.

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34. (Currently Amended) A cell components recovering apparatus comprising:

a substrate being disposed in a separation cell, wherein ~~at~~ the sample solution containing cells is supplied on a surface of the substrate, the substrate having a plurality of independent areas ~~are formed on the its surface of the~~ substrate;

capturing means for capturing each of the cells one by one separately on each of the plurality of independent areas;

means for identifying ~~at~~ the positions of ~~the one~~ areas of said plurality of areas where at the cells to be destroyed are present; and

temperature control means for heating the surface of the substrate at ~~one of the identified positions~~ said one area to a predetermined temperature to destroy the cell captured ~~therein at the area of the one of the identified positions,~~ to liberate cell components from the cell captured ~~therein at the area of the one of the identified positions~~ into the separation cell.

~~wherein, by introducing a washing solution into the separation cell, whereby the cells at the areas, except for the area at the one of the identified positions, remain on the areas, respectively, the washing solution is recovered to recover the cell components liberated from the cell, and~~

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~~wherein, by changing a position of the identified positions, the washing solution is recovered to recover the cell components liberated from the call for each of the identified positions.~~

35. (Currently Amended) A cell component recovering apparatus according to claim 34, wherein the captured cell is a white blood cell.

36. (Previously Added) A cell component recovering apparatus according to claim 34, wherein the capturing means comprises means for applying an alternating field onto the surface of the substrate.

37. (Currently Amended) A cell component recovering apparatus according to claim 34, further comprising means for applying a DC field onto a surface of said one area~~the one of the identified positions~~ in a solution which contains no polynucleotide and has a pH value of 4 or lower, to attract nucleotide components to the surface of the one of the identified positions.

38. (New) A cell components recovering apparatus according to claim 30, wherein by introducing a washing

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solution, the apparatus enables liberated cell components from the cell captured in said one area to be recovered while cells in areas other than said one area remain on the substrate,

and wherein said temperature control means individually heats different areas of said plurality of areas so as to enable recovery of cell components from all of said plurality of areas.

39. (New) A cell component recovering apparatus according to claim 38, wherein the captured cell is a white blood cell.

40. (New) A cell component recovering apparatus according to claim 38, wherein the capturing means comprises means for applying an alternating field onto the surface of the substrate.

41. (New) A cell components recovering apparatus according to claim 38, further comprising means for applying a DC field onto a surface of said one area in a solution which contains no polynucleotide and has a pH value of 4 or lower, to attract nucleotide components to the surface of the one of the identified positions.

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42. (New) A cell components recovering apparatus according to claim 34, wherein by introducing a washing solution, the apparatus enables liberated cell components from the cell captured in said one area to be recovered while cells in areas other than said one area remain on the substrate,

and wherein said temperature control means individually heats different areas of said plurality of areas so as to enable recovery of cell components from all of said plurality of areas.

43. (New) A cell component recovering apparatus according to claim 42, wherein the captured cell is a white blood cell.

44. (New) A cell component recovering apparatus according to claim 42, wherein the capturing means comprises means for applying an alternating field onto the surface of the substrate.

45. (New) A cell components recovering apparatus according to claim 42, further comprising means for applying a DC field onto a surface of said one area in a solution which contains no polynucleotide and has a pH value of 4 or lower, to attract nucleotide components to the surface of the one of the identified positions.